

FIG. 1

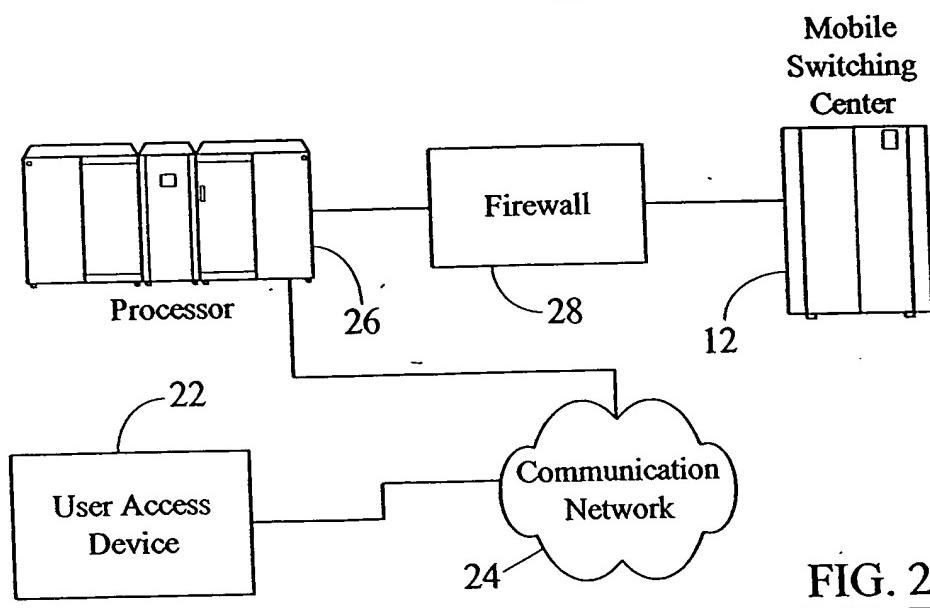


FIG. 2

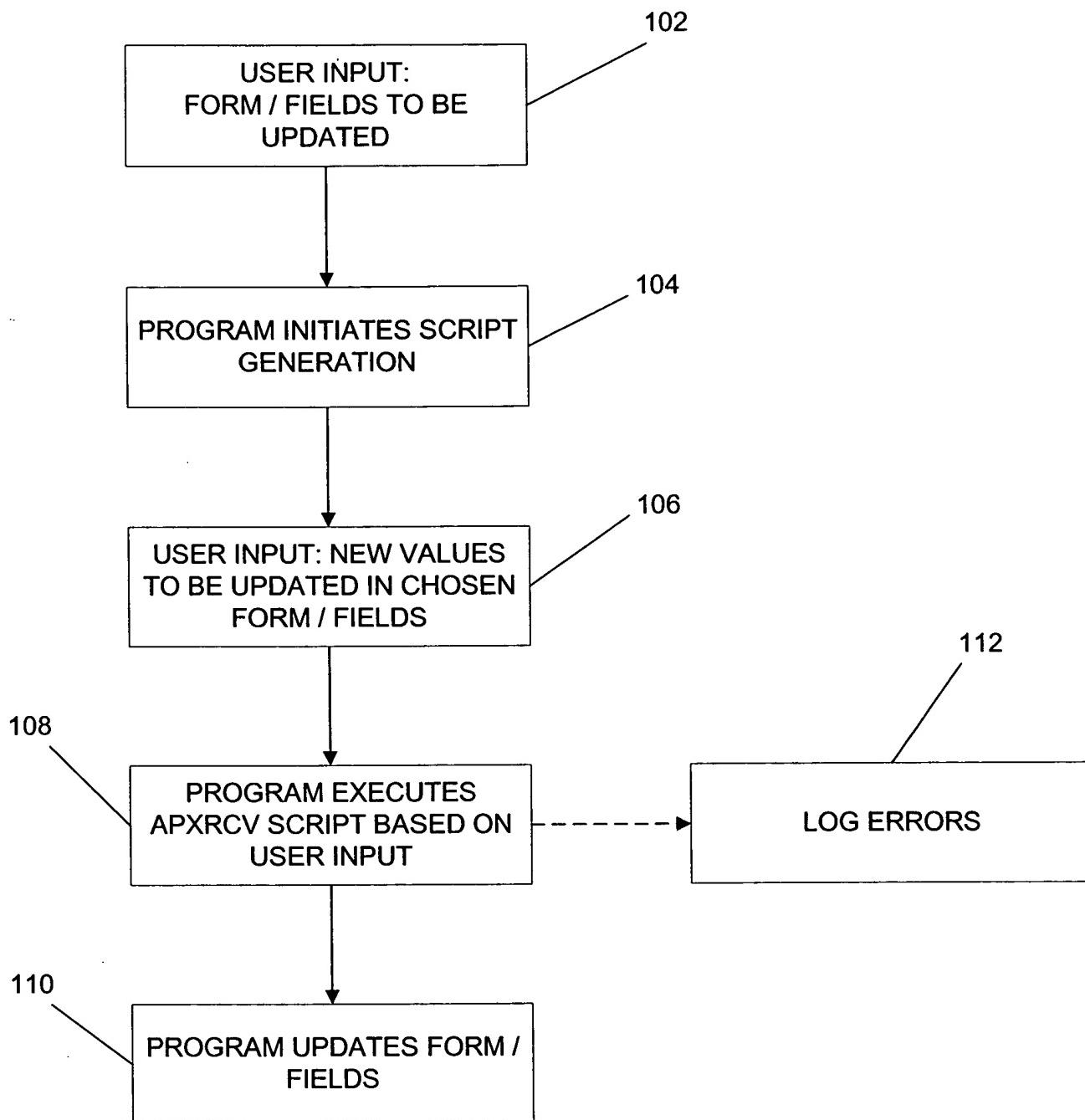


FIG. 3

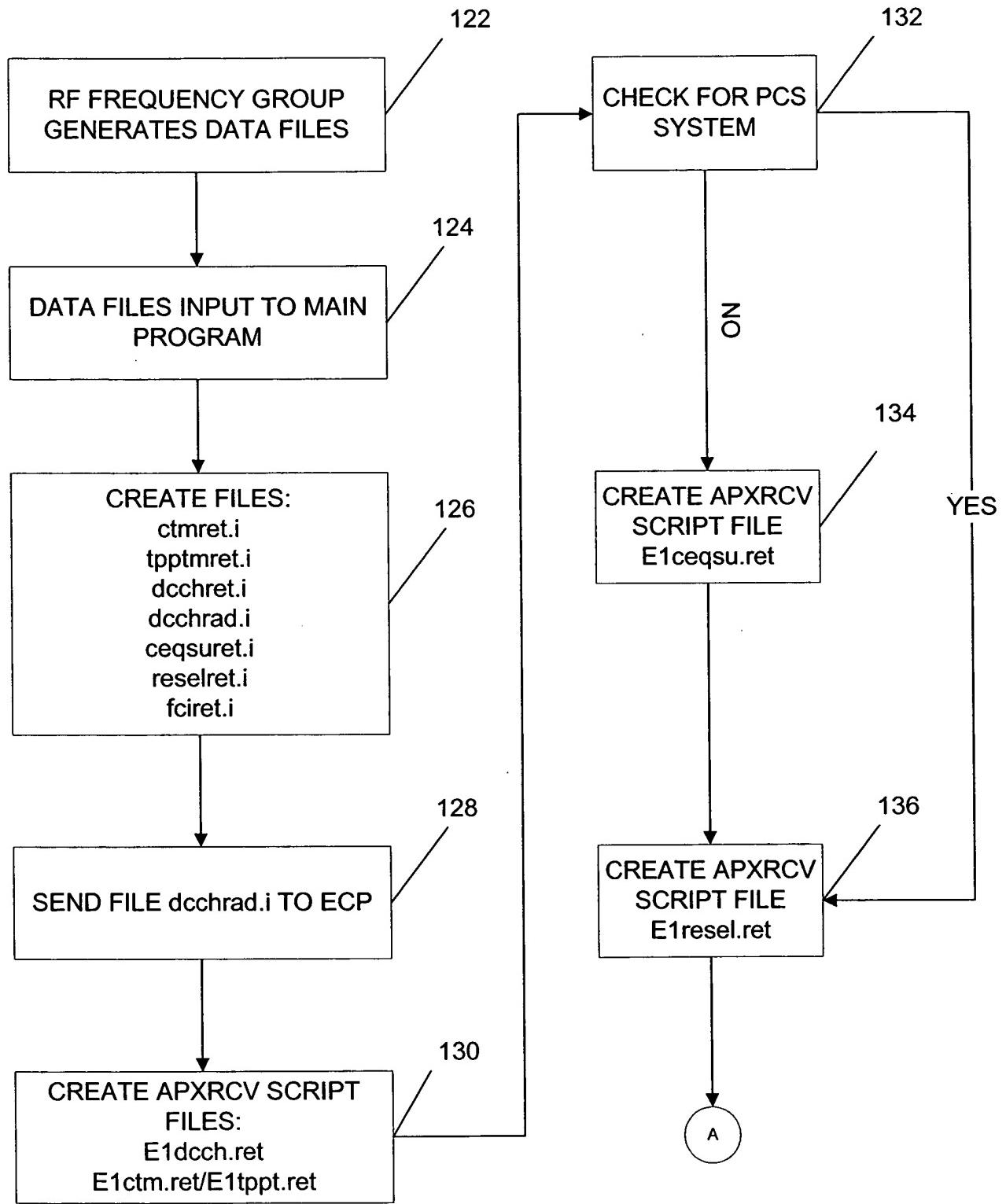


FIG. 4A

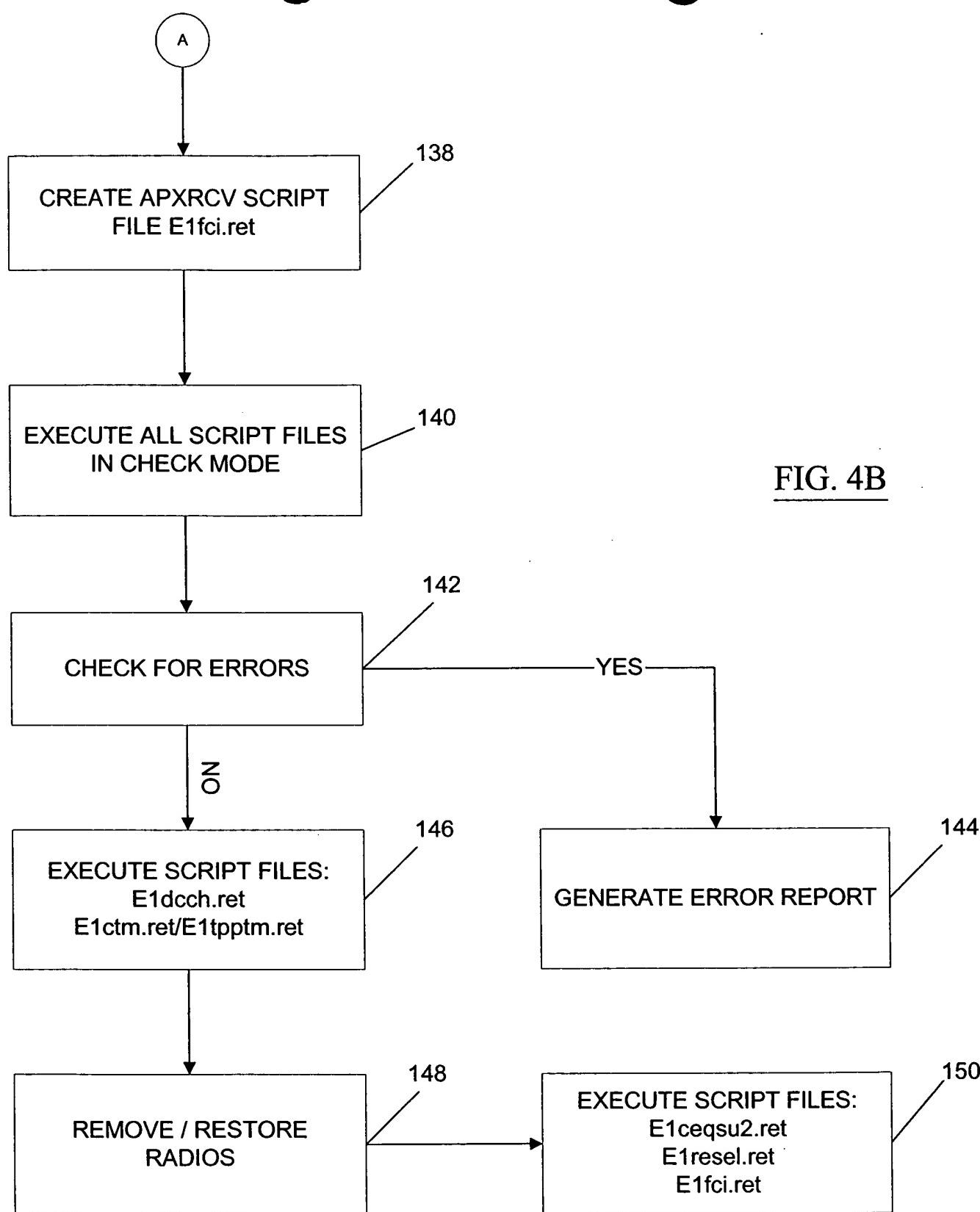


FIG. 4B

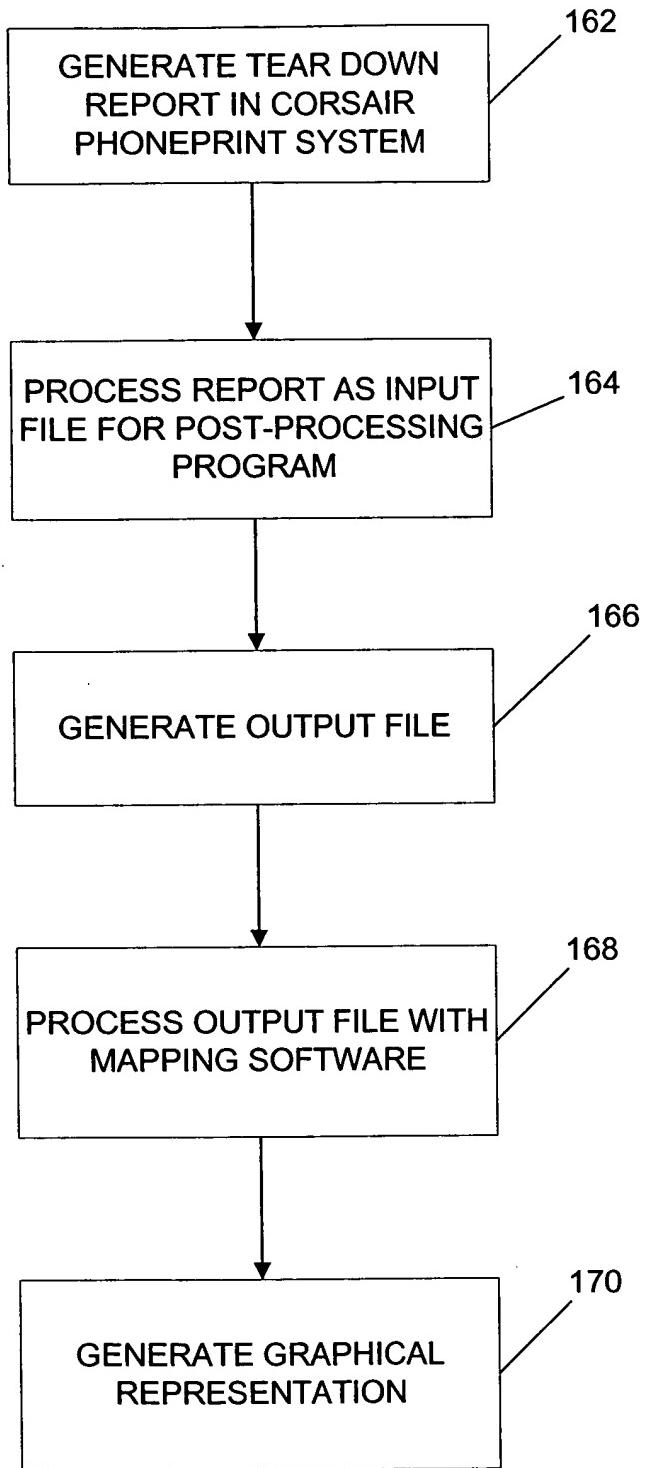


FIG. 5

>pg pp9912.txt

Date	Time(2)	Site_ID	MIN(1)	Dialed_Digits	Tear-Down_Reason	MFG
12/25/99	19:26:09	20		2012075854	12014981322	MFG
12/23/99	14:56:20	219		2012075854	5617767114	MFG
12/26/99	21:40:32	167		2012130072	19547814445	MFG
12/23/99	19:06:49	82		2012134416	9544289147	MFG
12/23/99	19:06:23	82		2012134416	9544289147	MFG
12/25/99	17:23:55	82		2012134416	9544285083	MFG
12/25/99	15:06:20	82		2012134416	2015680907	MFG
12/25/99	13:04:16	82		2012134416	2015680907	MFG
12/25/99	13:04:05	82		2012134416	2015680907	MFG
12/25/99	13:03:53	82		2012134416	2015680907	MFG
12/25/99	13:03:31	82		2012134416	2015680907	MFG
12/25/99	13:01:49	82		2012134416	2015680907	MFG
12/25/99	12:53:38	82		2012134416	2015680907	MFG
12/25/99	12:52:32	82		2012134416	2015680907	MFG
12/25/99	12:52:03	82		2012134416	2015680907	MFG
12/25/99	12:50:48	82		2012134416	2015680907	MFG
12/25/99	12:48:15	82		2012134416	2015680907	MFG
12/25/99	12:47:16	82		2012134416	5680907 MFG	MFG
12/24/99	11:58:50	82		2012134416	8003328463	MFG
12/24/99	11:58:08	82		2012134416	8003328463	MFG
12/24/99	10:03:16	82		2012134416	9544289147	MFG
12/22/99	14:58:09	80		2012300764	19546467166	MFG
12/29/99	10:54:28	177		2012400657	19086881800	MFG
12/29/99	10:51:49	177		2012400657	9412503698	MFG
12/29/99	10:25:04	145		2012400657	12012400657	MFG
12/29/99	10:24:42	145		2012400657	12012400657	MFG
12/27/99	21:26:01	49		2012476225	15616551115	MFG
12/24/99	19:22:48	219		2012476225	15615551212	MFG
12/24/99	19:22:26	219		2012476225	15615551212	MFG
12/24/99	19:22:06	219		2012476225	15615551212	MFG
12/24/99	19:13:38	219		2012476225	5617950022	MFG
12/27/99	12:01:06	20		2012476225	15614996976	MFG
12/23/99	16:23:47	12		2012640686	3105152822	MFG
12/23/99	16:17:19	12		2012640686	3105152822	MFG
12/23/99	16:17:03	12		2012640686	3105152822	MFG

FIG. 6

>pg map1299  
ECP,CellNo,Longitude,Latitude,Count  
4,1,-80.1675,26.155278,148  
3,5,-80.361111,25.699444,209  
1,6,-80.171667,26.36.675  
1,7,-80.114167,26.562778,173  
1,8,-80.109722,26.760556,76  
3,9,-80.317222,25.679444,311  
3,10,-80.266667,25.747222,115  
4,12,-80.29,26.183333,268  
3,13,-80.422778,25.526111,164  
4,15,-80.123056,25.854167,510  
4,16,-80.198611,26.248889,401  
1,18,-80.088889,26.45.380  
1,20,-80.058611,26.651944,216  
4,22,-80.210833,25.848611,138  
4,23,-80.128889,26.085833,844  
4,25,-80.288889,25.845556,55  
1,26,-80.201111,26.630833,251  
4,27,-80.204722,25.93.590  
3,28,-80.360833,25.596667,255  
3,29,-80.333889,25.649444,584  
4,30,-80.415,26.086389,207  
4,31,-80.175833,26.121944,128  
1,37,-80.681389,26.686667,213  
4,40,-80.364444,25.828333,156  
4,42,-80.286944,25.920556,147  
4,43,-80.168056,26.024722,333  
3,46,-80.129167,25.793611,2694  
3,47,-80.238611,25.811389,121  
1,49,-80.051667,26.711944,381  
4,50,-80.160556,25.908611,187  
4,52,-80.26,26.121667,456  
4,53,-80.105556,26.136389,501  
3,54,-80.383333,25.653056,81  
4,55,-80.249444,26.268333,314  
3,56,-80.294722,25.703889,184  
3,57,-80.315,25.808333,21  
3,58,-80.265278,25.788333,267  
4,60,-80.25,25.891667,205  
4,61,-80.090833,26.230278,147  
4,64,-80.211667,26.0175,595

FIG. 7

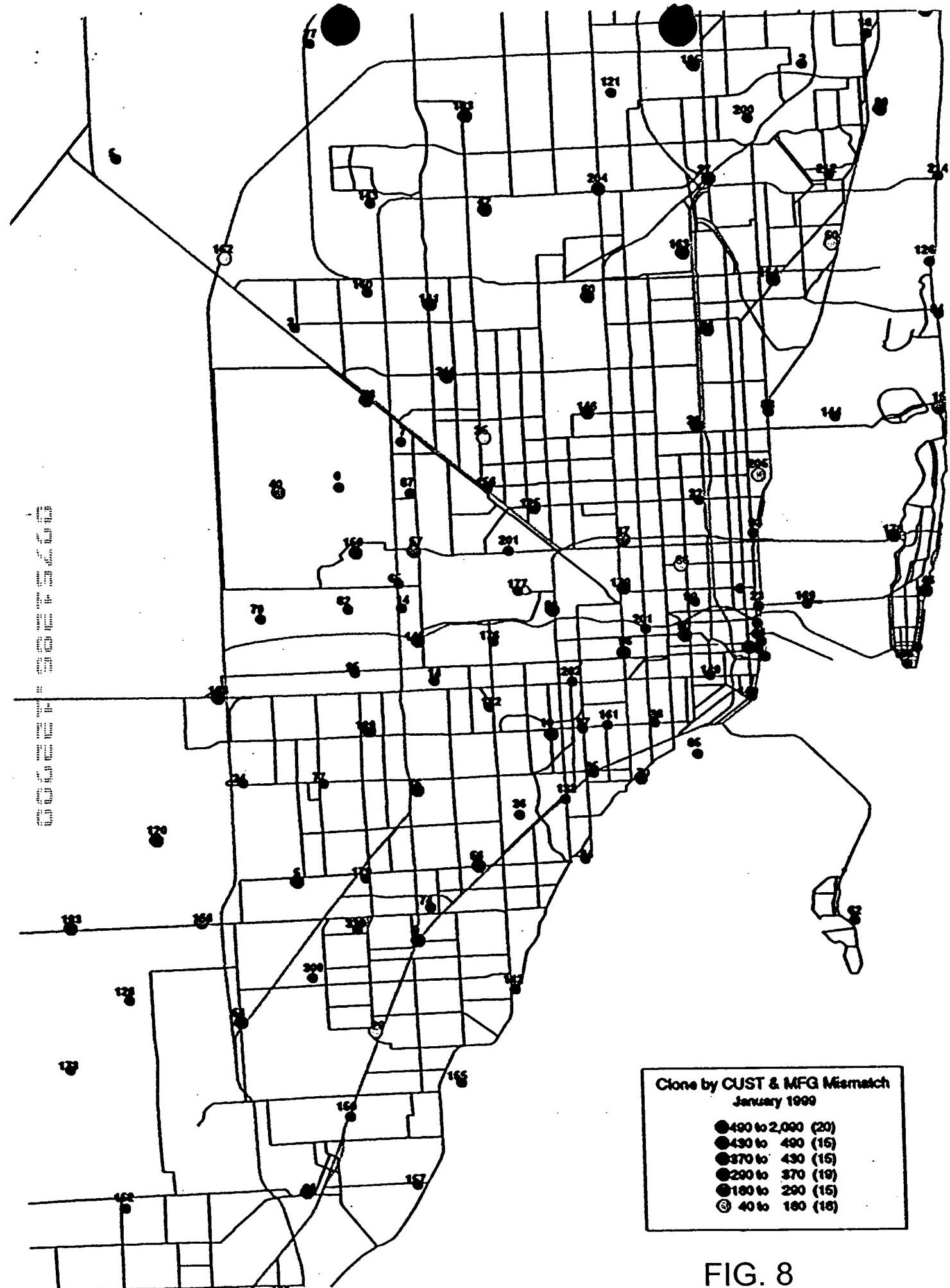


FIG. 8

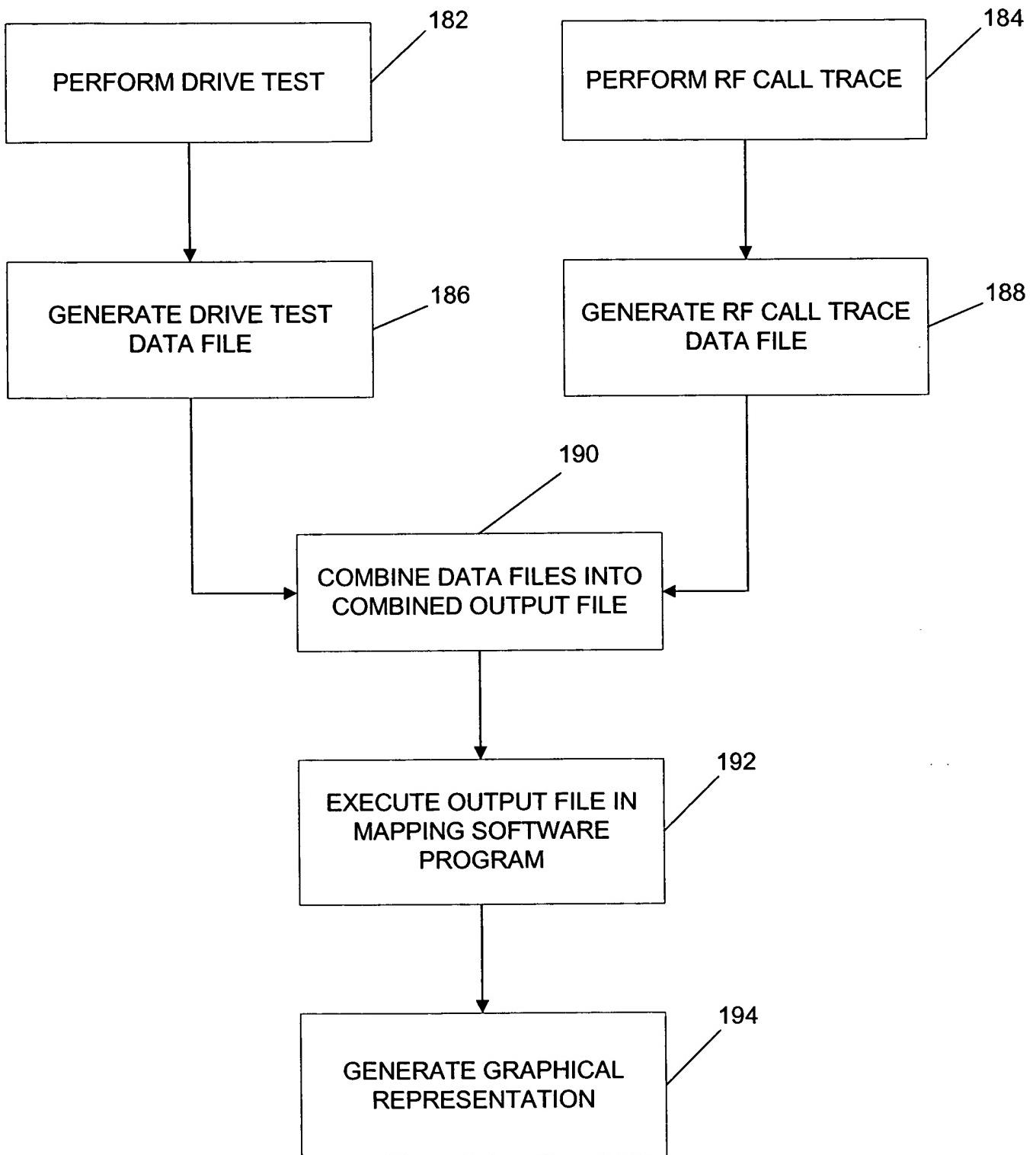


FIG. 9

SAMPLE Ericsson log

MOBILE TELEPHONY CELL TRAFFIC RECORDING  
DIGITAL SIGNAL STRENGTH MEASUREMENTS

MSNB	CELL	DEV	SSFVC	SSRVC
9412580201	T017C	MDVC-1060	23	20

SSSTDRC	BERFVC	BERRVC	RBERRVC	FERRVC
6	3	2	2	0

BQRVC	TDRVC	FREQERR	TIMEALIGN	MSPOW
15	0	1	0	2

NCELL	NSSFFMC	MEASCHAN	VIND
T017A	5	1260	Y
T017B	23	1272	Y
T006B	17	1300	Y
T016B	13	1305	Y
T004A	29	1251	Y
T005B	33	1302	Y
T005A	23	1290	Y
T018A	21	1294	Y
T154B	21	1303	Y

TIME	PRINTIND	FCODE
11:08:27	0	

END

MOBILE TELEPHONY CELL TRAFFIC RECORDING CANDIDATE LIST FOR  
HANDOFF

MSNB	CELL	TIME	FCODE	URGENCY
9412580201	T017C	11:08:27		0

CANDCELL	CELLTYPE	NTYPE	RATING
T005B	0	STD	0

END

FIG. 10

## XTEL LOG FILE

DATE,TIME,LONGITUDE,LATITUDE,ALT,SPEED,HEADING,GPS\_MODE,PHONE\_TASK,TASK,\_DESC,CHAN,RSSI,MODTYPE,SLOT,CHANTYPE,SAT,DVCC,POWER,BER,BER\_CODE,SBI,T,A,CELL1,DISTANCE1,CELL2,DISTANCE2,CELL3,DISTANCE3,LOWER\_CTOA,UPPER\_CTOA,COCHA\_RSSI,MARKER,CHAN\_GRP,EVENT,EVINFO,BAND,LISTTYPE,LISTCT,CHAN1,RSS11,CHAN2,RSS12,CHAN3,RSS13,CHAN4,RSS14,CHAN5,RSS15,CHAN6,RSS16,CHAN7,RSS17,CHAN8,RSS18,CHAN9,RSS19,CHAN10,RSS110,CHAN11,RSS111,CHAN12,RSS112,CCHAN13,RSS113,CHAN14,RSS114,CHAN15,RSS115,CHAN16,RSS116,CHAN17,RSS117,CHAN18,RSS118,CHAN19,RSS119,CHAN20,RSS120,CHAN21,RSS121,CHAN22,RSS122,CHAN23,RSS123,CHAN24,RSS124,CHAN25,RSS125,REVISION

7/30/99, 11:08:27, -

82 3321883 27 9813839 .9 .40 .3 .86 .9 , G8 , 5 , Conversation , 1218 . -

93.D.3.V.3.5.2.0.87.3.0.0.....14.15.-100.0.8...1.Neig.9.1284.-  
99.1202.-92.1300.-103.1255.-107.1317.-109.1303.-109.1314.-111.1305.-

89,1302,-9.  
111 1316

7/30/99, 10:52:47 - 1000-0-100-0-00-5 Conversation 1218 -

~~82.3321883, 27.9813839, 9, 40.3, 86.9, G8, 5, Conversation, 1218,-~~

93,D,3,V,3

**89, 1302, -93, 1300, -103, 1303, -107, 1255, -109, 1314, -111, 1317, -111, 1305, -**

111-1315-2

7/30/88 10:52:48 -

7730799.10  
82 3219553

**89, 1302, -93, 1300, -103, 1303, -107, 1255, -109, 1314, -111, 1317, -111, 1318**

~~111.1315.-~~

113.0.0.0

7/30/99, 10:52:48.-

82.3319553,27.9813947,10,43.1,87.0,G8.5.Conversation,1218

95.D.3.V.3,5,2,0.99,3,0,0,...,-10.38,-137.0,8...1.Neig.9.1284.

~~93, 1302, -93, 1300, -101, 1303, -105, 1255, -109, 1305, -111, 1314, -113, 1315, -~~

35,1501,  
113 1317

7730/99.10.52.49,-  
82 321216428814014 10 44 7 87 -2 G8 .5 Conversation 1218,-

95.D.3.V.3.

**83,1302,-93,1300,-101,1303,-105,1255,-109,1305,-111,1314,-113,1315,-**

FIG. 11A

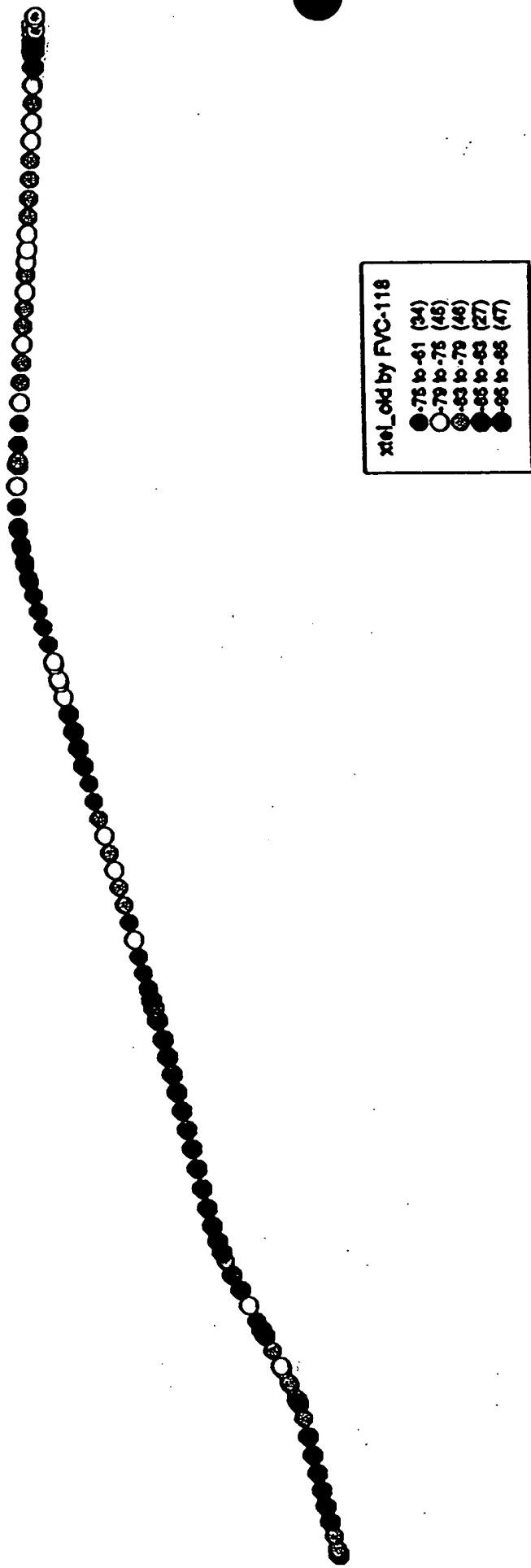
**T**

R,RBER,FER,BQ,TD,FREQ,TIME,MS,PRINT  
DEV,FVC,RVC,TDRVC,FVC,RVC,RVC,RVC,RVC,ERR,ALIG

28.0069725,9412580201,T017C,MDVC-  
15,0,1,0,2,0  
28.0069725,9412580201,T017C,MDVC-  
15,0,1,0,2,0  
28.0069856,9412580201,T017C,MDVC-  
15,0,2,0,2,1  
28.0069856,9412580201,T017C,MDVC-  
15,0,2,0,2,1  
28.0070392,9412580201,T005B,MDVC-  
2,0,4,0,2,1  
28.0072014,9412580201,T005B,MDVC-  
7,0,4,0,2,1  
28.0072014,9412580201,T005B,MDVC-  
7,0,4,0,2,1  
28.0073900,9412580201,T005B,MDVC-  
8,0,3,0,2,1  
28.0073900,9412580201,T005B,MDVC-  
8,0,3,0,2,1  
28.0075761,9412580201,T005B,MDVC-  
7,0,5,0,2,1  
28.0075761,9412580201,T005B,MDVC-  
7,0,5,0,2,1  
992,9412580201,T005B

FIG. 11B

FIG. 12



**Comarco File**

---

**13:20:00.8,26.677,-81.567**  
**13:20:01.2,25.230,-81.456**  
.....  
.....  
.....  
**13.21.00.3,28.655,-81.2128**

**FIG. 13A**

Time,Long,Lat,CellNo,SS,  
12:41:29,28.6559300,-81.205792000,1353,-124  
12:41:29,28.6559300,-81.205792000,201,-106  
12:41:29,28.6559300,-81.205792000,32,-106  
12:41:29,28.6559300,-81.205792000,321,-76  
12:41:29,28.6559300,-81.205792000,323,-66  
12:41:29,28.6559300,-81.205792000,831,-100  
12:41:30,28.6559260,-81.205580000,323,-66  
12:41:31,28.6559170,-81.205380000,321,-75  
12:41:31,28.6559170,-81.205380000,321,-75  
12:41:31,28.6559170,-81.205380000,323,-64  
12:41:32,28.6559080,-81.205198000,323,-63  
12:41:33,28.6558950,-81.204922000,321,-73  
12:41:33,28.6558950,-81.204922000,323,-62  
12:41:34,28.6558900,-81.204769000,321,-73  
12:41:34,28.6558900,-81.204769000,321,-73  
12:41:34,28.6558900,-81.204769000,322,-98  
12:41:34,28.6558900,-81.204769000,323,-61  
12:41:35,28.6558900,-81.204577000,1353,-124  
12:41:35,28.6558900,-81.204577000,201,-105  
12:41:35,28.6558900,-81.204577000,202,-106  
12:41:35,28.6558900,-81.204577000,32,-105  
12:41:35,28.6558900,-81.204577000,323,-63  
12:41:35,28.6558900,-81.204577000,831,-99  
12:41:37,28.6558970,-81.204219000,321,-73  
12:41:37,28.6558970,-81.204219000,323,-67  
12:41:38,28.6559000,-81.204044000,321,-74  
12:41:38,28.6559000,-81.204044000,323,-67  
12:41:38,28.6559000,-81.204044000,321,-74  
12:41:38,28.6559000,-81.204044000,323,-67  
12:41:40,28.6559020,-81.203683000,1353,-122  
12:41:40,28.6559020,-81.203683000,202,-104  
12:41:40,28.6559020,-81.203683000,32,-105  
12:41:40,28.6559020,-81.203683000,321,-73  
12:41:40,28.6559020,-81.203683000,322,-96  
12:41:40,28.6559020,-81.203683000,323,-67  
12:41:41,28.6559070,-81.203457000,321,-72  
12:41:41,28.6559070,-81.203457000,323,-66  
12:41:42,28.6559100,-81.203125000,321,-71  
12:41:42,28.6559100,-81.203125000,323,-66

FIG. 13B

v----- Record # 1: -----v  
05/10/99 13:22:05 ALM INF 4103 7 32 G TC 457  
Call Monitor: Call Record has been Written in RAM disk  
Ph#: (407)9223002 Call clear by MS - mobile clear

v----- Record # 2: -----v  
05/10/99 13:22:04 ALM INF 4113 7 32 G TC 457  
Call Monitor: Call RSSI value  
(407)9223002 cell 323 rrssi -77 attn 4 snr 40

v----- Record # 3: -----v  
05/10/99 13:22:04 ALM INF 4117 7 32 G SRC  
Call Monitor: Adj. cell RSSI values from Scanning Rcvr.  
(407)9223002 Cell\_id/RSSI: 323 / -73

v----- Record # 264: -----v  
05/10/99 13:21:00 ALM INF 4117 7 20 A SRC  
Call Monitor: Adj. cell RSSI values from Scanning Rcvr.  
(407)9223002 Cell\_id/RSSI: 201 / -98

v----- Record # 265: -----v  
05/10/99 13:21:00 ALM INF 4117 7 32 B SRC  
Call Monitor: Adj. cell RSSI values from Scanning Rcvr.  
(407)9223002 Cell\_id/RSSI: 322 / -103

v----- Record # 266: -----v  
05/10/99 13:21:00 ALM INF 4117 7 83 A SRC  
Call Monitor: Adj. cell RSSI values from Scanning Rcvr.  
(407)9223002 Cell\_id/RSSI: 831 / -96

v----- Record # 267: -----v  
05/10/99 13:21:00 ALM INF 4117 7 32 A SRC  
Call Monitor: Adj. cell RSSI values from Scanning Rcvr.  
(407)9223002 Cell\_id/RSSI: 321 / -78

v----- Record # 268: -----v  
05/10/99 13:21:00 ALM INF 4117 7 135 G SRC  
Call Monitor: Adj. cell RSSI values from Scanning Rcvr.  
(407)9223002 Cell\_id/RSSI: 1353 / -113

v----- Record # 269: -----v  
05/10/99 13:21:00 ALM INF 4117 7 20 B SRC  
Call Monitor: Adj. cell RSSI values from Scanning Rcvr.  
(407)9223002 Cell\_id/RSSI: 202 / -100

v----- Record # 270: -----v  
05/10/99 13:21:00 ALM INF 4113 7 32 G TC 457  
Call Monitor: Call RSSI value  
(407)9223002 cell 323 rrssi -72 attn 4 snr 40

v----- Record # 271: -----v  
05/10/99 13:21:00 ALM INF 4117 7 32 G SRC  
Call Monitor: Adj. cell RSSI values from Scanning Rcvr.  
(407)9223002 Cell\_id/RSSI: 323 / -71

v----- Record # 272: -----v  
05/10/99 13:21:00 ALM INF 4117 7 3 B SRC  
Call Monitor: Adj. cell RSSI values from Scanning Rcvr.  
(407)9223002 Cell\_id/RSSI: 32 / -115

FIG. 14

FIG. 15

tra0528_out by SS		
○	-85 to -66	(600)
●	-92 to -85	(534)
●	-98 to -92	(466)
●	-106 to -98	(540)
●	-115 to -106	(482)
●	-127 to -115	(565)